

# "Instant" delays for '67 & '68

By Charles Kolb

Chaos reigned Monday as 7000 students enrolled for the fall term at MIT. The disorganized state of affairs was due in part to a new computer system which was designed to speed the registration procedure. Using the freshmen and sophomores as guinea pigs, the Registrar's Office had hoped to show that schedule changes and adjustments could be provided instantly by computer.

Eight IBM 1050 printers in two locations on campus addressed subject or section changes to the IBM 7094 at the computation center. The computer was supposed to make instant changes and return the final schedule within a few minutes.

Sophomores, after an hour wait to submit their changes, were asked to return in two or three hours to pick up their new assignment. As the afternoon progressed, delays of five hours were not uncommon. It remains to be seen if those who had not even received their final schedule by the registration deadline Monday afternoon would have to pay the five dollar fine.

The printers, located in Walker Memorial for the freshman and building 26 for the sophomores,



Photo by John Torode

Progress? Harried freshmen hardly agree as lines build up, waiting for the computer's "instant" processing. Expressions of impatience were to no avail; freshmen still waited in Walker at 7:30 pm Monday.

were the first attempt to use time-sharing for an administrative problem.

The computer-registration experiment was designed and conducted by MIT's Office of Institutional Studies under Robert E. Hewes, director and former registrar.

Design of the system was the work of Robert E. Holz, associate

director, who was assisted by Jim Linderman, '64, and John Howard, '65. Warren D. Wells, registrar, worked closely with the group.

When the new program is perfected processing time for registration material should be cut from two days to a few hours. This will enable department heads to check immediately on the size and nature of classes within their departments, or the administration to quickly determine a student's final schedule.

## Adams, Athans, Hyatt named to professorships

Three men have been appointed to professorships to begin this academic year. They are: Dr. Michael Athans, assistant professor of electrical engineering; Mr. Abraham Hyatt, Jerome Clarke Hunsaker Professor of Aeronautical Engineering (visiting); and Dr. Clyde M. Adams, Jr., American Brake Shoe Professor of Metallurgy.

Dr. Athans, an employee of Lincoln Laboratory, became a lecturer in the department of electrical engineering last February. He is also a Ford Post-Doctoral Fellow and the first recipient of the Donald P. Eckman Award of the American Automatic Control Council.

Mr. Hyatt was formerly a top engineering executive of the federal space agency. He has also served in senior engineering positions in the Glenn L. Martin Company and McDonnell Aircraft Corporation. The Hunsaker Chair was established in 1954 in the Department of Aeronautics and Astronautics to honor Professor Hunsaker, emeritus member of the MIT engineering faculty.

Dr. Adams was appointed professor of metallurgy in 1963. He has conducted extensive research in the joining of metals, materials processing, heat transfer and solidification of ice and metals.

The American Brake Shoe Professorship was founded by the American Brake Shoe Company in 1955 and was originally held, in Foundry Metallurgy, by the late Professor Howard F. Taylor.

## Dr. George C. Manning, XIII, died in his home

Dr. George C. Manning, Professor Emeritus of Naval Architecture, died at his home in Osterville, Mass., Saturday, September 19.

Dr. Manning joined the MIT faculty in 1936, and became Professor of Naval Architecture in 1944.

He served as acting head of the Department of Naval Architecture and Marine Engineering from 1950-1952. In 1957 he helped establish and then direct a new department of naval architecture at the University of Sao Paulo in Brazil.

Born in Washington, D. C., in 1892, Professor Manning was graduated from the U. S. Naval Academy in 1914 and received an S.M. degree from MIT in 1920. After having served as superin-

## Killian to be present

# Dr. Green '23 will dedicate Green Building Oct. 2

By George Russell

Dedication ceremonies for the Cecil and Ida Green Building will be held starting at 3 p.m. Friday, Oct. 2 in the South Plaza of the building. The dedication will follow an International Conference on the Earth Sciences to be held at MIT, Sept. 30-Oct. 2.

Honored guests at the dedication will be Dr. and Mrs. Green of Dallas, Texas, whose gift of \$6 million to the Institute's Second Century Fund made the new building possible. Dr. Green, an alumnus (S.B. 1923, S.M. 1924) of MIT, is Honorary Chairman of the Board of Geophysical Service, Inc., Dallas, and a Vice President and Director of GSI's parent organization, Texas Instruments, Inc., also of Dallas.

Dr. James R. Killian, Jr., Chairman of the MIT Corporation, will preside at the dedication. Some forty members of the Corporation will be present as hosts. Responses to the formal presentation of the building by Dr. Green will be given by MIT President Julius A. Stratton, Prof. Henry G. Houghton, Head of the Department of Meteorology, and Prof. Robert R. Shrock, Head of the Department of Geology and Geophysics. Principal speaker at the dedication will be Dr. Roger Revelle, Director of the Scripps

Institution of Oceanography, La Jolla, Calif. An open house will follow from 4:00 to 5:30.

The international conference will begin at 9:30 am on Wednesday, September 30, in Kresge Auditorium with opening remarks by Pres. Stratton and Dr. Charles H. Townes, Provost, who is conference chairman.

Major topics of discussion will be the earth's environment in space, atmospheric motions, oceanography, and the solid earth.

Speakers will include: Professor Gerard P. Kuiper, Director of the University of Arizona Lunar and Planetary Laboratory; Dr. Aleksandr M. Obukhov, Chairman of the Commission on Atmospheric Physics of the Soviet Academy of Sciences, USSR; and Dr. Walter H. Munk, Professor of Geophysics at the University of California at San Diego and Associate Director of the University's Institute of Geophysics and Planetary Physics.

On Thursday, Dr. A. E. Ringwood, Senior Fellow in the Department of Physics at the Australian National University, will deliver a paper on the composition and phases of the earth's mantle. A conference banquet will be held at the MIT Faculty Club the evening of Thursday, October 1.



Photo by John Torode

Biannual lineup was in full swing as techmen queue for roll-cards. Lobby of building 10 gets crowded and Bursar's line gets longer as 7000 students register. At least it won't happen again until February.

## Mrs Widnall joins Engineering faculty

Mrs. Sheila Evans Widnall '60, appointed assistant professor of Aeronautics and astronautics this summer, has become the first

MIT alumna to serve on the School of Engineering faculty.

Mrs. Widnall is also the first woman Ford Post-doctoral Fellow at the Institute, and the first alumna to hold membership in the Tau Beta Pi national engineering honorary society.

She received her Bachelor and Master degrees simultaneously in 1961, after following the 5-year undergraduate honors program in the department.

## Dr. Ashley to serve at Indian Institute

Dr. Holt Ashley, who was granted a leave of absence from MIT, is now in India helping to develop a new Department of Aeronautics at the Indian Institute of Technology at Kanpur. He is serving with the Agency for International Development there through a non-profit organization, Educational Services, Inc.

The Indian Institute will serve as a model for training engineers and scientists in India, and will eventually educate 1,600 undergraduates and 400 graduates annually.

## Civil Service examinations will be starting October 17

The 1965 Federal Service Entrance Examinations will be administered October 17 through April 15, 1965. Seven tests, in all, are scheduled.

The examination is open to college seniors and graduates regardless of major study. Over 200 types of positions will be available — located with Federal agencies throughout the United States, and a few overseas.

Depending on the qualifications of the candidates, starting salaries will range from \$5,000 to \$6,050 yearly.

In the case that applicants have attained a sufficiently high score upon the Graduate Record Examination Aptitude Test, the Civil Service exam will be waived.

Further information is available in the Placement Office, 1-173.

## Mellon charities sends \$100,000 here

MIT and Harvard have each received \$100,000 grants from the Richard King Mellon Charitable Trusts. Eight other U.S. universities are each to receive such grants to establish fellowships in city planning and urban renewal.

Each school will receive \$100,000, payable over a five-year period in annual instalments of \$20,000. Half of this amount is to be granted by the school as fellowship aid to one or more Mellon Fellows in city planning, or urban renewal. The other half will be allocated to the schools for faculty salaries to support the fellowship programs.



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## Communications Conference

# Red China examined

Two communications research experts from MIT participated in a conference on communications in national development held recently in Honolulu.

The conference was sponsored by the East-West Center, a Congress-created organization for the promotion of cultural and techni-

cal interchange between east and west.

Dr. Daniel Lerner, Professor of sociology and international communications, and Dr. Lucian W. Pye, chairman of political science section of Course XIV, were featured speakers at the gathering. Professor Lerner was a co-director of the conference with Dr. Wilber Schramm of Stanford University.

Dr. Lerner suggested to the conference that Communist China was substituting propaganda for more substantial stimulants to economy in its effort to gain increased production. By using massive communications to motivate its people to maximum productivity, the Chinese hoped to score large economic gains.

Dr. Pye told the conference that China's great communications effort had not produced impressive national development, and that China was not progressing as fast as other undeveloped nations.

## Belluschi on panel

Pietro Belluschi, Dean of the School of Architecture and Planning, was appointed to a five-man national advisory committee that met in Washington to evaluate entries in the first Honor Awards Program in Urban Renewal Design, sponsored by the Urban Renewal Administration.

Awards announcements will be made in October.

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Unsigned editorials in The Tech are the opinion of The Tech's Board of Directors, not that of MIT. The Tech welcomes letters from its readers. Space permitting, such letters will be printed in whole or in part, if deemed by the editor to be of sufficient interest or benefit to the community. Brevity increases the chance of publication. Anonymous letters will not be printed, but names will be withheld upon request.

## The MIT Image

Probably most freshmen come to MIT with some idea of the Tech 'image.' Many of them think this image is a standard of conformity. Nothing could be farther from the truth.

An MIT 'image' may exist in the minds of some parents and high school teachers and even businessmen; but a little questioning shows that everyone sees the school differently. We have heard the Institute described as everything from a trade school to an Ivy League university, and the students as everything from Wall Street snobs to bespectacled beatniks.

The impossibility of pinning down the classification of the MIT 'image' reveals the truth of the matter—there is no 'image,' no standard at Tech except the general goal of excellence. Officially the Institute tries to foster the impression of the individual, the 'whole man'—but not any particular man. Recent magazine attempts to classify all MIT students under one heading have been offensive to students and administration alike.

Of course, around the campus there are plenty of images to conform to—fraternity images, activities images, political images, even that old standard, the 'collegiate image.' Sometimes the students themselves go to some lengths to cultivate this sort of image; they feel it is expected of them, as much a part of their college training as is the curriculum.

There is a certain value to conforming to some social standards; and most of the groups which demand a degree of conformity have good reason for doing so, because these groups are offering a form of training for a later social or professional life with similar standards. But there is a certain danger and futility in conforming to a non-existent 'MIT collegiate image.'

MIT can claim one of the most truly collegiate atmospheres in the country; there is about the Institute an air of striving after knowledge which is unique among American universities. This atmosphere provides the key to success at MIT. Hard work in this environment produces the MIT man, whose outstanding

characteristic is not his Ivy League attire nor his way with women, but his depth of understanding of the basic concepts of science, engineering and the humanities. More, the successful student will have acquired social and civic responsibility, taste for the excellent things in life, and the spirit of leadership which has kept MIT in its top position in the world of education and research.

The particulars of a student's development are up to the individual. He may enjoy athletics, politics, news writing or music; he may be an electrical engineer, an economics major, a management scholar or a pre-med student. Awareness of the variety of MIT's opportunities and realization of the importance of individual accomplishment will lead the mature student to create his own 'MIT image.'

## Activity finances

The recent history of one well-established campus organization re-emphasizes the necessity of accurate and thorough maintenance of records by activities. An involved series of conferences with the Office of the Dean of Student Affairs and with other student groups have, it now appears, preserved the existence of an organization that has in times past made worthwhile contributions to the undergraduate environment. A new constitution, a new organization and a continuing source of revenue should re-establish this group.

Much of the confusion and inter-necine bickering that has occurred in this case could have been avoided if competent and thorough sets of constitutional, historical, and financial records had been kept.

The liberties granted by the Institute administration to the students in the self-direction of student affairs are not a license for exploitation, irresponsibility, or petty politics. The annual turnover budget of many organizations runs into thousands of dollars, and a few groups handle annually tens of thousands of dollars.

It is clear that because of the diversities in size and directions of our activities, no one standard, rigid system of book-keeping could be appropriate. It is now within the powers of the Finance Board, however, to require presentation of any activity's financial records for review and possible audit.

At present only the records of organizations in obvious trouble, and those organizations which directly seek out help from the Finance Board, are systematically reviewed. An annual review of every group's financial and organizational records would be impractical and unnecessary. However, a system of random spot checks of records continued throughout the year, might well benefit the continuity, solvency, and efficiency of student organizations.

A new scheme of student government is in early planning stages. Could this spot-check plan be incorporated?

## Freshman Weekend

This year's Freshman Weekend was a great success. Under the leadership of David Rubin '65 the Freshman Coordinating Committee produced a weekend that fully achieved its purpose.

The efforts of the committee began last spring. Committee members made preliminary plans and convinced student leaders of the inevitable success of the weekend. The program was changed to include only one of the Introduction to Technology lectures that had filled previous weekends. More time was allowed for living group orientation. The added time for the living groups was of benefit to the dormitories, which do not have the Rush Week period to begin orientation.

The Activities Midway received a large attendance this year. To the credit of the Freshman Class, it appeared that most of the students were selective, showing interest in several activities rather than indiscriminately attempting to cover the field.

We offer our congratulations to the committee for a job well done.

## Cherchez la Femme

### Two Tech mixers, Garland, BU stand out from general confusion

Confusion runs rampant at Boston Girls' schools at this time of year, and the same confusion exists in the mixer information this week. Dormitory social chairmen, when asked about mixer information, were more likely to inquire if YOU knew about any mixers their girls could attend.

Not all is lost, however, since a few schools have emerged from the beginning-of-term fog to schedule enough to start thinking about girl meeting boy.

This Friday the IDC, coming to the rescue of the dateless technician, is holding a mixer in Walker Memorial. Admission is \$1.00 for Techmen, although tickets at reduced prices are supposedly available in Building 10 this week. The mixer begins at 8:00, and will feature Richard Martin's orchestra.

Competing with IDC is Burton House, which offers its "All Tech Acquaintance Dance?" from 8 to 12 Friday. Admission is 99c.

Two other mixers also are

scheduled for Friday. Garland Junior College will hold one at 8:30 at 411 Commonwealth Avenue. No other information was available, so you can assume they want anyone male. The other is in Braintree, not a great distance for those of you with cars. It's sponsored by the Aquilo Club, subtitled the Junior League of the Swedish Charitable Society of Greater Boston. Although no fee is mentioned, the club's purpose is fund raising, so there will likely be a charge. The dance is at the Viking Club. There will be Scandinavian and American dances.

Boston University will have an all-university mixer this Saturday at the School of Public Communications, 640 Commonwealth Avenue, at 8:00. Although this is supposedly for BU students, Techmen are generally welcome.

That about covers this week's mixers. With more schools opening and others getting better organized, next week should bring a larger selection.

## Kibitzer

By Alan Rinsky

The MIT Bridge Club sponsored a team-of-four at the Activities Midway last Friday night. The game: any Freshman team-of-four that could tie or beat the Club team at four boards of duplicate bridge received for each of its members a free one-semester Club membership (\$2.00 value). The results: One freshman team tied and four teams lost.

The Club team consisted of the pairs Skeist-Rinsky and the unbeatable Freedman-Humer pair.

For \$2.00, you can become a member of the Bridge Club and are entitled to compete for masterpoints at the tournaments which are held nearly every Saturday afternoon in Pritchett Lounge, Walker Memorial. Watch the bulletin boards for announcement of the first tournament. The bridge club has the policy of paying one-half of the entry fee to Boston Sectional tournaments for its members. The normal fee is \$4.00 per person for an all-day sectional, so you get back the cost of your membership fee for playing in one sectional.

### The bidding

East opened 1 diamond with the intention of bidding his clubs twice if he had further opportunities to bid in order to show at least five cards in each of those suits.

South overcalled with 1 heart on the strength of an opening hand. After West's 1 spade response, North supported hearts with a good four-card suit and a probab'e side trick in the King of Diamonds. East showed his clubs and South rebid hearts.

At this point, West's hand takes on added value since he has six

North (dealer)  
♠ 7 5 3 2  
♥ A J 10 3  
♦ K 2  
♣ 10 4 2

West  
♠ K Q J 9 8 6  
♥ 7  
♦ J 10 3  
♣ 9 7 5

East  
♠ 10  
♥ K 9  
♦ Q 9 8 7 6  
♣ A K J 6 3

South  
♠ A 4  
♥ Q 8 6 5 4 2  
♦ A 5 4  
♣ Q 8

Rubber bridge. Neither side vulnerable.

### The bidding:

North	East	South	West
Pass	1 ♦	1 ♥	1 ♠
2 ♥	3 ♣	3 ♥	3 ♠
Pass	4 ♣	4 ♥	Pass
Pass	Pass		

West led the King of Spades.

cards in his partner's bid suits and a singleton in the opponents suit. He rebid his almost self-sufficient spade suit. North passed and East rebid his clubs at the four level and South bid 4 hearts, the contract.

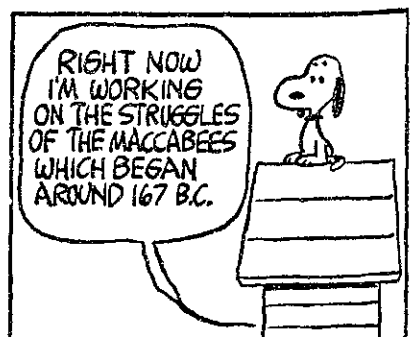
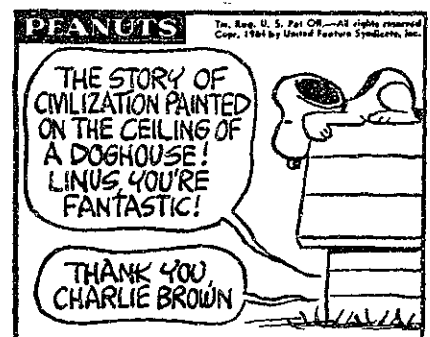
### The play of the hand

South won the opening lead with the Ace of Spades and finessed the Jack of Hearts. East won that trick with the King of Hearts and played his King and Ace of Clubs and led the Jack, which South ruffed in his hand.

South eventually lost a spade trick and went down one, losing two clubs, a heart, and a spade.

After a short post mortem, it was determined that there was a correct play for the contract.

(Please turn to Page 4)





## Overhage, Sanborn new officers

Dr. Carl F. J. Overhage was Lincoln Laboratory and Prof. elected vice president to represent Sanborn is associate dean of the the mathematical and physical Graduate School. sciences of the American Academy of Arts and Sciences, and Prof. Sanborn C. Brown was elected its secretary. Dr. Overhage was director of Smith.

## Commencement, Alumni Day

### Stratton gives 2 major addresses

Six hundred and forty degrees for those graduating and their parents. The speakers were: Edward J. Hanley '24, president of Allegheny Ludlum Steel Corporation; Howard O. McMahon '41, president of Arthur D. Little, Inc.; Dr. Jerome B. Wiesner, Dean of the School of Science; and the Hon. Robert H. Winters, '33, former member of the Canadian cabinet and Parliament.

Steve Glassman, permanent president of the Class of 1964 moderated.

**Symposium**  
A symposium, entitled "The Graduate's Role in Tomorrow's World," was held on June 11 in Kresge as part of the program

**Hanley's remarks**  
Mr. Hanley spoke from the viewpoint of industry at the colloquium,

and was especially concerned with the obsolescence of knowledge:—"Your education has given you two types of resources. One is a way of thinking, of analyzing, of arranging facts, and reaching conclusions. This will be with you forever. The other is certain technical proficiency—of more or less immediate value in your first job."

"This latter knowledge will begin to become obsolete the minute you leave school."

"And unless it is updated in your work, or by other means, it will become of less and less value to you and the enterprise to which you will become a part."

#### 'Intellectual capital'

Hanley cited "competent authorities" who have "estimated that the college graduate of 1964, has only six years of intellectual capital. A PhD in Physics has intellectual capital of only seven years. A PhD in engineering owns intellectual capital of only eleven years."

Main speaker of the 98th Commencement was President Julius A. Stratton. In addition, he personally distributed each degree.

In another major event, Doctor Stratton addressed an assembly of nearly 1,500 MIT alumni and their guests the Monday following Commencement.

The Alumni Day gathering was reminded that the true measure of a university is not to be found simply in its new buildings:—

"A great university—like a great city—can see its history and its progress, in part, in its architecture. Its buildings, like the rings of a tree, provide visible evidence of its stages of growth."

"Yet the true measure of a university is found in less tangible things—in the achievements of its alumni, in the character of its scholarship, and, above all, in the effectiveness of its teaching and the aims of its educational plan."

In this context, President Stratton reviewed recent Institute activities calculated to maintain and strengthen MIT's international stature.

Two major activities cited were the review and revision of the undergraduate curriculum now pending before the Faculty, and the establishment of the privately-supported \$15 million Alfred P. Sloan Fund for Basic Research in the Physical Sciences.

"Our primary aim in the use of this fund will be to raise to even higher levels the quality, rather than the quantity, of our research," Stratton noted.

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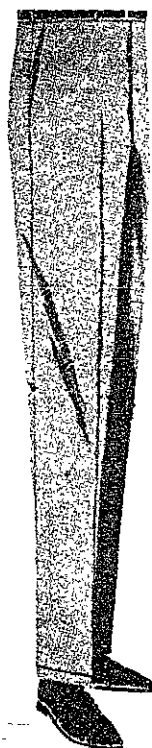
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summer Night's Dream"; Tues.-  
Wed., Kurosawa's "Yojimbo."  
Shows daily 5:30, 7:30, 9:30,  
Mats. Sat. and Sun. at 3:30.

## Overseas jobs the topic for 3 speeches at BU

Francis X. Gordon, Executive Director of the International Student Travel Center, will speak to students interested in foreign employment October 5, 4 and 8 pm, and October 6, 8 pm, in the Conference Auditorium of Boston University.

According to the ISTC, year-round and summer jobs in Europe will be available for nearly 800 students and teachers from 17 to 35.

The variety of jobs ranges from resort and hotel work to chauffeuring, factory, and farm work. In the past year over 500 have gained employment abroad through the organization.

## Movie Schedule

Wednesday, September 23, through Tuesday, September 29 (Unless otherwise stated, the Sunday schedule is the same as the weekday schedule except that no movies are shown before 1:00 p.m.).

**ASTOR** — "Night of the Iguana," 10:00, 12:20, 2:35, 4:50, 7:20, 9:45; Sun. 1:00, 3:05, 5:10, 7:15, 9:30.

**BEACON HILL** — "A House Is Not a Home," 10:20, 12:15, 2:10, 4:05, 6:00, 8:00, 9:55; Sun. 1:00, 2:45, 4:30, 6:15, 8:10, 10:05.

**BOSTON CINEMA** — "Circus World," eves. at 8:30, mats. Wed. at 2:00, Sat. and Sun. at 2:00 and 5:15.

**BRATTLE** — Today, Orson Welles's "The Trial"; Thurs.-Fri.-Sat., "Wild Strawberries"; Sun.-Mon., "A Midsummer Night's Dream"; Tues.-Wed., Kurosawa's "Yojimbo." Shows daily 5:30, 7:30, 9:30, mats. Sat. and Sun. at 3:30.

**CAPRI** — "Lorna," 10:50, 12:40, 2:30, 4:20, 6:10, 8:00, 9:50; Sun. 1:50, 3:40, 5:30, 7:20, 9:10.

**CINEMA KENMORE SQUARE** — "Seduced and Abandoned," 1:30, 3:35, 5:40, 7:45, 9:55.

**ESQUIRE** — "Tom Jones," weekdays at 7:00 and 9:20; Sat. and Sun. at 2:15, 4:30, 6:50, and 9:18.

**EXETER** — "Mafioso," 2:15, 4:00, 5:00, 7:40, 9:30.

**GARY** — "Behold a Pale Horse," 10:00, 12:21, 2:42, 5:03, 7:25, 9:46; Sun. 5:11, 7:24, 9:37.

**HARVARD SQUARE** — Burton as "Hamlet," via electronic vision, 2:00 and 8:00. Starting Fri.: "Marnie," 1:15, 5:30, 9:25; "The Chalk Garden," 3:25, 7:35.

**KEITH MEMORIAL** — "I'd Rather Be Rich," Mon.-Thurs. 9:30, 12:36, 3:42, 6:48, 9:54; Fri.-Sat. 9:28, 12:36, 3:44, 6:52, 10:00.

**LOEW'S ORPHEUM** — "Of Human Bondage," 10:30, 12:20, 2:10, 4:05, 5:55, 7:50, 9:55; Sun. 1:45, 3:35, 5:30, 7:25, 9:20.

**MUSIC HALL** — "A Shot in the Dark," 10:15, 12:30, 2:45, 5:00, 7:20, 9:45; Sun. 1:00, 2:30, 5:20, 9:45.

**PARAMOUNT** — Wed. and Thurs. only, "Hamlet," starring Richard Burton, at 2:00 and 8:00; starting Fri., "Que Vadis," 10:12, 1:39, 5:06, 8:33.

**PARK SQUARE CINEMA** — "Seduced and Abandoned," 1:30, 3:35, 5:40, 7:45, 9:55.

**SAXON** — "The Visit," 10:00, 12:00, 2:00, 4:00, 6:00, 8:00, 10:00; Sun. 1:30, 3:30, 5:30, 7:30, 9:30.

**UPTOWN** — "Bedtime Story," 11:00, 2:35, 5:15, 7:55; Sun. 3:35, 7:40, "Pink Panther," 12:35, 4:15, 7:55; Sun., 1:25, 5:25, 9:25.

**WEST END CINEMA** — "The Chocolate Soldier," and "Maytime," no times available.

## Kibitzer

(Continued from Page 1)

From the bidding and the opening lead, South should know the East started with at least two cards in diamonds and clubs and probably only one spade. Therefore East very likely started with one or two hearts, one of which must be the King in order for his point count to be high enough to bid as he did.

After winning the opening lead with the Ace of Spades, South should take the King and Ace of Diamonds and trump his last diamond with the Three of Hearts to the dummy.

Then he leads the Two of Clubs and East wins with the Ace. East cannot lead a Heart or a Diamond without giving declarer an extra trick, so he must take his King of Clubs and lead the Jack, which South ruffs.

South has seen West discard three diamonds and three clubs, so he knows East started with five diamonds, five clubs, one spade, and two hearts.

Now South leads a heart and wins with the Ace. A second heart throws East in with the King, at which point he must lead a club or a diamond. Either lead allows South to discard a spade in his hand and ruff with his last trump in the dummy, making the contract.

## Three groups form Goldwater coalition

MIT's three pro-Goldwater student political groups have banded together for the presidential campaign. The Students for Goldwater, Young Republicans, and Young Americans for Freedom recently joined forces in a "Goldwater campaign coalition."

The group claims a present membership of over 200, and hopes to enroll 10% of the undergraduate body by November.

The group will staff a booth in building 10 until the election.

## Theatres

**CHARLES** — opening Tues., Sept. 23, 8:30 pm, "A Touch of the Poet," by Eugene O'Neill.

**COLONIAL** — "Barefoot in the Park," eves. except Sun. at 8:30, mat. Sat. at 2:30.

**SHUBERT** — "Ben Franklin in Paris," eves. except Sun. at 8:30, mats. Sat. 2:30, Tues. 2:15.

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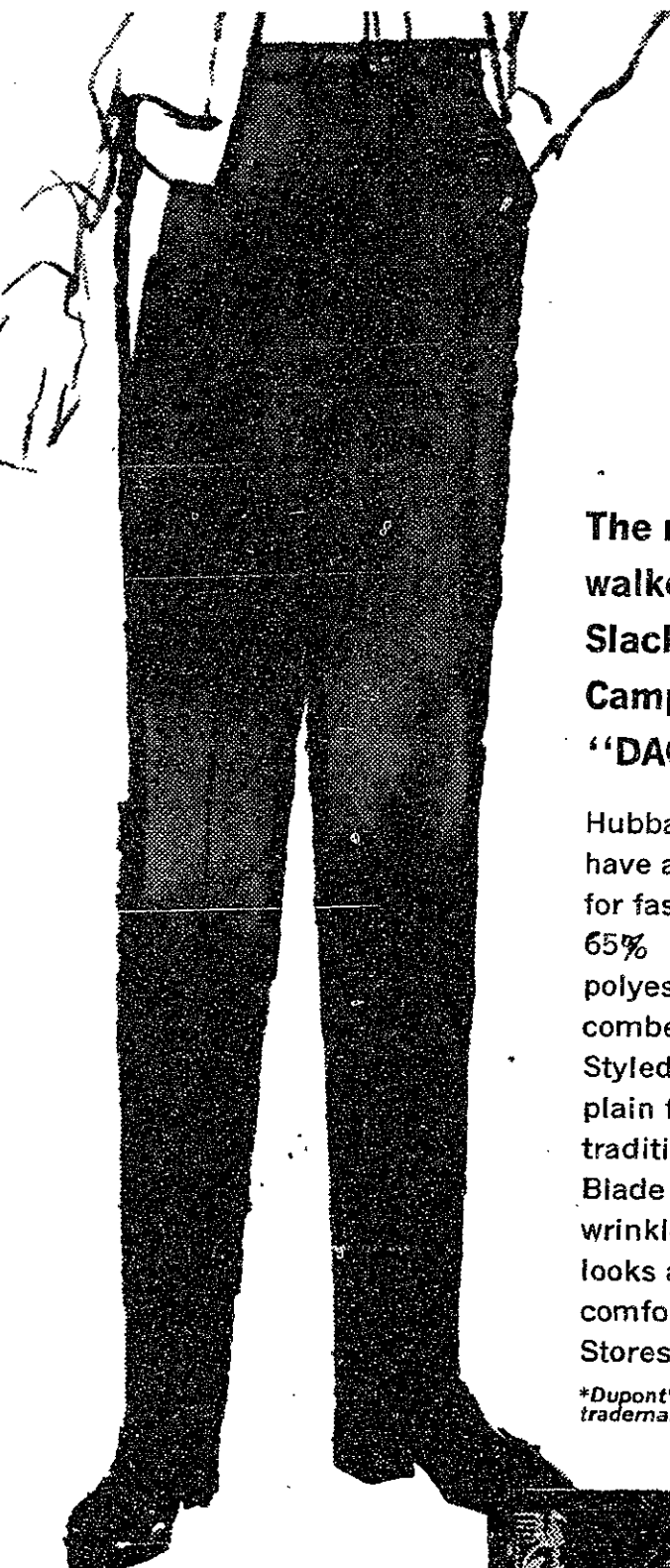
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HUBBARD



movies...

'Pale Horse' effective but boring

By Mona Dickson

'Behold a Pale Horse,' now showing at the Clary Theatre, is the type of movie Hemingway would have made had he been a movie director. The result is strange, to say the least.

The plot unfolds in typical Hemingway style. Gregory Peck plays Manuel Artigues, a hero of the Spanish revolution banished to France, who has led raids into Spain for twenty years. His age has slowly taken ambition, drive, strength, belief from him. Suddenly he realizes he is old and useless, even though he is still a fiery idealist inside.

Even in weakened condition, Manuel presents a threat to Captain Vignores, of the Spanish police, played by Anthony Quinn. After twenty years of trying, he still must catch Artigues or loose face. When Manuel's mother hears her last days, the Captain sets a trap to catch the son who will surely come to see her. This trap is the substance of the movie, for two solid hours.

Manuel and Vignores are the symbols of age. Into their personal antagonism are drawn two symbols of youth. Omar Sharif plays the intense young Father Francisco (there is irony there somewhere) who is caught between his vows and his ideals. Pepi, the boy with vengeance in a child's heart, represents innocence just beginning to be corrupted.

Except for the priest, all the characters have been corrupted in some way. They are idealistic, but base; cynical, but ever hopeful. Vignores stops for a moment in a chapel to light two candles and pray, "Please, Lord. Help me to capture this man or I will

**BEHOLD A PALE HORSE:** Produced and directed by Fred Zinneman; Music by Maurice Jarre; Written by J. P. Miller; Based on a story by Emeric Pressburger; starring Gregory Peck as Manuel Artigues, Anthony Quinn as Captain Vignores, Omar Sharif as Father Francisco, and Marietto Angelletti as Pepi; at the Clary Theatre.

be degraded. It has been twenty years." A few minutes later he is beating information out of a priest.

The film explores youth discovering the faults of the previous generation, age continuing the fight of youth long after reason and ability have worn out, men with heaven and hell co-existing inside them. The psychological possibilities of this movie are great. Unfortunately, they have not been fully developed.

The script is superb, every sentence being a moral yet holding the others in place. "The war is over, Manuel. Why don't you stop?" are some of the first words of the movie. They could as well be the last.

With such a script, the acting reaches unusual heights. But act-

ing and script cannot carry the movie alone.

By attempting to show the grayness of life and ideals, the movie goes too far. "Behold a Pale Horse" becomes gray.

Just what causes the plot to become flat is hard to pin down. The scenery is drab enough to do any avant-guard film justice; the directing is worse than dull. But the most boring aspect of the film is the very thing that could make it most interesting.

If only it were not so closely knit, with a few irrelevant ideas thrown in just for diversion, it would be bearable. A climaxless two hours of moralizing fails to effectively present the ideas it continually launches from the screen.

But there is one saving grace to the program at the Clary—the cartoon. It is a most unusual, enjoyable tale, a folk song set in color. "Little Boy Bad" had the audience clapping after five minutes. It was especially enjoyable to me since I arrived late and saw the cartoon after the main film.

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Broadcast of symphony live on WGBC, WCRB

The Boston Symphony Orchestra will broadcast its concerts live again this year. WGBH-FM will carry the Friday series at 2:00 pm and the Saturday series at 8:30 pm. WCRB is planning taped rebroadcasts of out-of-town performances, as well as AM and FM stereo coverage of the Saturday series.

Erich Leinsdorf, musical director and conductor of the symphony, has scheduled for the first concerts, September 25 and 26, Brahms' Academic Festival Overture, Beethoven's Symphony No. 6, and Shostakovich's Symphony No. 1.

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Contemporary Series

Opening: FRIDAY, Sept. 25  
**SOUTH PACIFIC**  
6:30 & 9:30 Kresge

Coming soon

- Oct. 2 The Silence
- Oct. 9 Bridge on the River Kwai
- Oct. 16 Sundays and Cybele
- Oct. 23 The Defiant Ones
- Oct. 30 North by Northwest
- Nov. 6 Yesterday, Today and Tomorrow
- Nov. 13 1984
- Nov. 20 Lord of the Flies
- Dec. 4 Long Day's Journey into Night
- Dec. 11 8 1/2
- Jan. 8 The L-Shaped Room
- Jan. 15 Lilies of the Field

Entertainment Series

Opening: SATURDAY, Sept. 26  
**LAWRENCE OF ARABIA**

One Show 7 p.m. Kresge

Coming soon

- Oct. 3 From Russia with Love
- Oct. 10 Dr. Strangelove
- Oct. 17 Charade
- Oct. 24 Seven Days in May
- Oct. 31 Promises, Promises
- Nov. 7 The Pink Panther
- Nov. 14 The Wrong Arm of the Law
- Nov. 21 The VIP's
- Dec. 5 The Longest Day
- Dec. 12 The Victors
- Jan. 9 The Cardinal
- Jan. 16 Mutiny on the Bounty

Classic Series

Opening: SUNDAY, Sept. 27  
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Coming soon

- Oct. 4 A Nous la Liberte
- Oct. 18 Of Mice and Men
- \* Oct. 25 What Price Glory?
- \* Nov. 1 The Last Laugh
- \* Nov. 15 Birth of a Nation
- Nov. 22 Grand Hotel
- Dec. 6 Arsenic and Old Lace
- Dec. 13 Spellbound
- Jan. 10 Tillie's Punctured Romance

General admission to all but (\*)shows, 50 cents. Membership tickets on sale now in Bldg. 10, as well as at the first two shows.

Complete schedules will be available by Sept. 28.

In an effort to equalize the admission prices of both movie series while compensative for increasing cost of operation the L.S.C. announces that admission both Friday and Saturday nights will be 50c.

# Activities viewed

## Frosh explore midway



Photo by John Torode

Sports, publications and clubs vie for converts as activities stage midway for freshmen. Rockwell Cage was scene of activity Friday night as annual event was staged in connection with freshmen orientation. Crowd views trophies and captured jerseys at crew exhibit as teams hope to gain top frosh athletes.

## General Electric awards \$20,000 in grants to MIT

The General Electric Foundation awarded four \$5,000 grants to MIT. The grants are for graduate study in pure mathematics and statistics, metallurgy and ceramics, engineering, and industrial engineering and manufacturing processes.

These four grants were among 150 recently awarded by the General Electric Foundation totaling \$650,000. Lesser amounts were awarded to Brandeis, Boston University, and Harvard.

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## Killian, Townes receive honorary degrees attending commencement exercises

Among those at MIT to receive honorary degrees in June were Dr. Killian and Dr. Townes.

Dr. James R. Killian, Jr., Chairman of the Board of MIT, was awarded the Doctor of Humanities degree at the commencement exercises of Rollins College in Winter Park, Florida.

Dr. Charles H. Townes, the Provost, received the honorary degree of Doctor of Science from Worcester Polytechnic Institute after he gave the commencement address at Rice University.

## Japanese tour MIT

165 Japanese public school superintendents made MIT and Harvard their choice as this country's leading educational institutions and traveled 7,254 non-stop air miles to tour them.

They arrived from their record-breaking flight Sunday, September 13 on a Northwest Orient jet. Clocking for the trip was just under 14 hours.

## Making the Scene

### THIS WEEK MUSIC

Gardner Museum — Sat., Sept. 26, Luca Di Cecco, cellist; Boccherini, Adagio; Brahms, Sonata, Op. 99. Sun., Sept. 27, Stephen Manes, pianist; Beethoven, Sonata, Op. 109; Chopin, Sonata, Op. 35 ('Funeral March'); works of Mozart and No-wak. Both concerts at 3:00 pm, admission free.

Boston Symphony Orchestra — First concert of the new season, conducted by Erich Leinhardt; Shostakovich, Symphony No. 1; Beethoven, Symphony No. 6; Brahms, Academic Festival Overture. Fri. at 2, Sat. at 8:30.

Charles Theatre — opening Tues., Sept. 29, Eugene O'Neill's 'A Touch of the Poet,' 8:30 pm.

Colonial — 'Barefoot in the Park,' starring Myrna Loy; tickets \$2.75 to \$7.50.

Shubert's — 'Ben Franklin in Paris,' a new musical starring Robert Preston. Tickets from \$2.75 to \$7.50.

MISCELLANEOUS

Museum of Fine Arts — Through Nov. 1, New Acquisitions from the Department of Asiatic Art; also continuing special exhibitions in the department of prints and drawings.

S	M	T	W	T	F	S
			23	24	25	26
27	28	29	30	1	2	3
4	5	6				

Museum of Science — 'Backyard Astronomy' at the Planetarium, through Oct. 4; museum admission \$1.00, planetarium admission 50c plus museum admission.

Boston Public Library — Current Central Library Exhibits include the Nathaniel Hawthorne Centennial, the Age of Napoleon, Paris, and the Presidency. Admission Free.

Institute of Contemporary Art — 'Communication by Design,' 400 works by four Boston area designers; the exhibit is focused on the commercial production of design for business and industrial companies. One of the designers, Muriel Cooper, was the first designer on the staff of the MIT press.

Hayden Gallery — 60 prints by Maurits Escher, through October 5, admission free.

### NEXT WEEK MUSIC

Gardner Museum — Oct. 3, Donald Caldwell, violin, Carol Rand, piano; Beethoven, Sonata, Op. 30, No. 3; Haleff, Polka, Oct. 4, Louis Speyer, oboe and English horn, with Reginald Boardman, piano; music of Mozart, Schubert, Hindemith, Khachaturian, and others. Both concerts at 3:00 pm, admission free.

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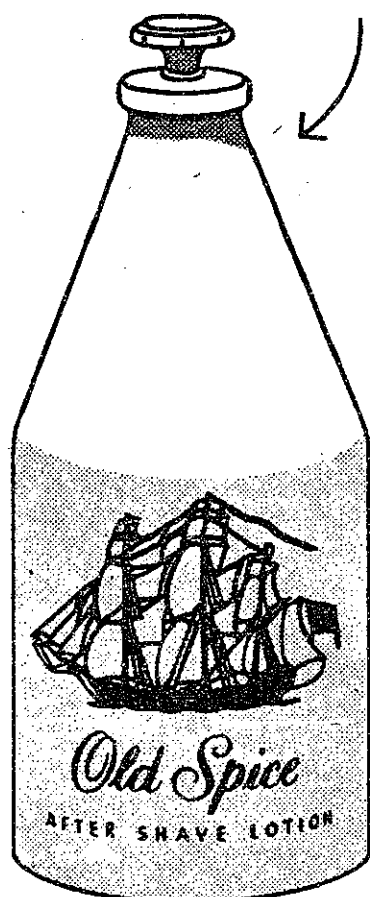
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**Systems engineering course**

**Orbiting observatory plan developed**

Complete preliminary engineering analyses and design for a six-ton unmanned satellite were developed last year by a task force of seniors and graduate students.

The 28-man group presented a final report in Kresge Auditorium to representatives of federal agencies and of industry, and wrote a 300-page description of their work.

The satellite — called Advanced Orbiting Astro-physical Observatory (AOAO) — was the second so designed by a systems engineering class here. The first was an equatorial weather satellite.

The satellite was designed for

launch in 1975 on a Martin Company Titan III booster. It would go into a 500-mile orbit.

Basic AOAO form would be a hollow cylinder nine feet across and 30 feet high made from sheet beryllium. This would be the barrel of the AOAO's Cassegrain reflecting telescope with a 100-inch primary mirror at the bottom and a 20-inch secondary mirror at the top. Three fin-like equipment lobes would be placed around the barrel, giving AOAO the appearance of a highly-speed airplane with three severely-swept delta wings equidistant around the fuselage.

A conventional two-mirror telescope would project an image out its primary mirror end, but the students found locating image-recording equipment there would give the vehicle an unfavorable weight distribution. The student design is for an eight-inch indexing mirror between the larger mirrors and positioned at a 45-degree angle to project the image sideways into the lobe containing a TV camera and instruments to analyze light from stars and planets.

Heat from a reactor known as MACE would produce 1000 watts of power.

The group calls the reactor MACE because conical covers over the converters would give it the appearance of a spiked medieval battle club. Before and during launch, the reactor would be held quiescent by removal of a control plug and would be stored in the power supply lobe. In orbit, the reactor — plus an 18-inch tungsten-and-lithium hydride radiation shield — would be deployed outward on a boom and the control plug inserted. The boom would be of wire mesh which would extend when filled with polyurethane foam on signal.

The communications and data processing lobe would contain a computer, memory storage reservoirs for delayed read-out of data, equipment for converting information gathered by the experiments into digital form, and both narrow band and wide band radio.

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## Eight return

# Soccer squad expects top year despite losses

The MIT soccer team is again looking for a very good season out on the fields and hope to return to their position around the top of the pile in New England. They should easily improve on last year's 5-4-2 record.

The team will undoubtedly miss the services of three-time All-New England and New England scoring champ Bob Mehrabian '64. Mehrabian's three years at Tech saw him lead the team to a total record of 18-7-4, including a 6-1-1 season his junior year. Also lost to graduation were top goalie Dave Dunford and Warren Littlefield.

The squad still looks for an improved season since there are experienced lettermen returning at all eight other spots. Captain Ed Roberts '65 heads the list of returning regulars, which also includes Savit Bhotiwihok '66, Mike Long '65 and Amedeo Odoni '65. Also expected to return to a starting spot is Mohamed Chikhaoui '65, who played his sophomore year but did not play last year.

## Beat Mid-Atlantics

# Sailors lead New Englanders to win

By W. Thomas Compton

The MIT sailing team got off to a good start last weekend helping the New England team knock off the Mid-Atlantic team 3-2 at King's Point, New York. The New England team consisted of MIT, Coast Guard, and University of Rhode Island. Princeton and RPI joined host King's Point to make up the Mid-Atlantic team.

There were five races of six boats each. The winner of a race was determined by the total number of points for each team. Each boat received one point for starting the race, one for finishing, and one for each boat it beat.

### Cronburg captains MIT

Don Schwanz '66, captured the New England team with Terry Cronburg '66 captaining the MIT boat. Jack Turner '66 and James Cronburg '67 completed the MIT team.

Freshman practice starts Tuesday, September 22. Varsity sailors have kept in shape all summer and start practice at the same time. The next match is the Pentagonal at Coast Guard September 27. The freshmen first get into action at the Hexagonal at MIT.

### Tech scores one first

Thirty foot Shield's sloops were raced, which require four man crews. The MIT boat got a first,

## Farnham coaches touring US team

Art Farnham, MIT's head track and cross-country coach, spent his spring coaching a U.S. national team touring West Africa under the auspices of the AAU and the State Department. The trip contingent of Coach Farnham, seven athletes and a manager, covered five countries as goodwill ambassadors. The trip, which ran from mid-April until early June, included the countries of Senegal, Guinea, Nigeria, Mali, and Ivory Coast.

There were three general activities undertaken by the team on their tour. The squad competed in actual meets against the Africans, put on exhibitions, and held clinics and lectures concerning track and field.

The American athletes were generally superior to the Africans, but Coach Farnham noted that there was a great deal of potential in the teams he saw, especially in Nigeria. The Africans seemed to be especially strong in the sprint races and jumping events, while they had weaknesses in the distance races and weight events.

The general living conditions, especially in the areas of food and sleep, seemed to be a deterrent to their development. Our training methods were also somewhat superior, which was one reason why the team made the trip.

a second, a third, a fourth, and a sixth. On the last race, one of the boats broke a main halyard and was out. Scoring for the last



One of the most important aspects of the athletic program at MIT is the role played by the students in the administration of athletics. The large number of opportunities where students can handle important responsibilities indicates the confidence of MIT in both the values and abilities of student management.

The Athletic Association is made up of representatives from each area of the athletic program. The captains of each sport together form the T-Club Council headed by the President of the T-Club. As actual participants in competition the captain is in one of the best positions to discern the real benefits of the intercollegiate program. His judgment is particularly valuable in setting up short range programs like team gatherings as well as longer range plans such as the scheduling of opponents.

The head manager of each sport is the coach's delegate to the Athletic Association with regard to operation of the individual teams. As the controller of the team budget, the manager has the responsibility of making sure his team is transported, lodged and fed well. He is in the best position to determine where money can be saved and the longer range requirements of his team in planning future budgets.

### Council handles IM program

Since the early history of MIT, the intramural program has been run by the students who form the Intramural Council. The managers of each of the 16 intramural sports under the leadership of the Intramural Vice-President decide on the policy of the entire program. Everything from scheduling to referees is handled by the intramural manager. Protests, eligibility or other items involving the whole program are handled by the Council.

### New program: club sports

The newest program organized under the Athletic Association controls the club sports. These games provide the competition of the intercollegiate schedule as well as the casual atmosphere of intramurals. Under the control of the AA Secretary, the teams are able to use the facilities and medical services and obtain funds for equipment and trips. The Athletic Association is directed by the Executive Committee made up of the president, varsity and intramural vice-presidents, the T-Club president and the secretary. Each of these five officers meet once a week with the Director of Athletics Ross Smith to discuss projects and student opinion.

Once a month during the school year the Athletic Board meets to discuss the overall philosophy of athletics in general and render final judgment on important decisions. This board is made up of three faculty members, three alumni, four representatives from the Athletic Association and five administration officials.

## A.A. picks James Joy to coach frosh crews

The MIT Athletic Department announced during the summer the hiring of Mr. James C. Joy to the post of freshman crew coach and physical education instructor. Joy, a 1960 graduate of the University of Western Ontario, is presently employed as teacher-coach at The Hinckley School, Hinckley, Me.

Mr. Joy was a former member of the St. Catherine's Rowing Club in Ontario, which won the 1961 Canadian Henley championship and placed second in the United States Lightweight National championships. Mr. Joy was also the Canadian intercollegiate 130 pound and 137 pound wrestling champion in 1957-58-59.

## Schwanz captains

race was therefore on a four boat basis, since one boat from each team was eliminated from the scoring list.

## MIT Athletic Association

### Captains form T-Club Council

## Frosh Sports

# Sailors take Nickerson Trophy

The freshmen sailing team was the only spring squad to score better than a .500 season. They had an outstanding season, talking all three matches in which they entered, and won the Nickerson Trophy, symbolic of the New England freshman championship. At least one freshman skipper figures to push out present varsity men to move onto the top squad.

### Baseball

The baseball team swamped Cambridge School in their last game last spring by a 28-2 score to finish the season with a 3-9 record. Although the squad nearly outscored their opponents in total runs scored 96-102, the runs didn't seem to be coming at the right time. Top men on the frosh squad were pitcher Rick Papanhausen and third-sacker Mike Ryba.

### Tennis

A loss in the season finale to Noble & Greenough by a tight 5-4 count brought the netters' record to 2-9. The two wins came over Dean Junior College and Brown & Nichols by 9-0 and 5½-3½ scores. The top three men on the squad, Eric Coe, John St. Peter, and Mike Gelberg will be in top contention for varsity spots next spring.

### Track

A victory over the University of New Hampshire in the final track meet of the spring season left the cindermen with a 3-3 win-loss record. In this closing meet, which the trackmen won 71-65, frosh cindermen John Ryder, Roy Tala and Gordon DeWitte led the victory with wins in the 880 yard run, the mile, and the hammer throw, shot put and discus respectively. Ryder, DeWitte, Greg Wheeler and Jim Kurt'y are top men for the varsity squad this year.

### Lacrosse

The frosh lacrosse men had a

## 5-2 final track mark

# Trackmen end season with winning record

By Ted Trueblood

The overall outlook on the various spring sports at Tech last term was far from pleasing to Tech sports followers as only the MIT track team has a winning record at the end of the season. Bucking the trend in what must be called a very slow season for the Tech teams, MIT's consistently strong showing cindermen finished the spring season with a 5-2 won-loss record while the tennis squad finished 8 and 8 for a .500 percentage on the season, the lacrosse men came out at 5 and 9, the baseball nine closed at 2-15 and the golfers ended up with a hapless 2-16 record.

### Trackmen beat UNH 78-66

Highlighting an otherwise barren spring season with their high competitive spirit, Tech's trackmen won impressively in the early meets of the season and only in their late season meets did they suffer losses to perpetual Eastern strongmen Columbia and Northeastern. In their last school meet of the spring season, the

cindermen made an outstanding comeback after two losses with their strong showing against another New England powerhouse, the University of New Hampshire, by winning the meet with a 12-point margin 78-66. Strongmen in the meet, Jim Flink '64, Kim Sloat '64 and Sumner Brown '64 led the team in their winning effort against UNH by taking the 100 and 220 yard dashes, the shot put and discus, and the mile and 880 yard run respectively.

**Dorshner sets record in hurdles**  
In the New Englands held at White Stadium in Boston May 22, Tech's trackmen finished eleventh in a very strong field of twenty New England college teams. Terry Dorshner '65, MIT's leader in the 440 yard intermediate hurdles, won that event in the New Englands in 53.6 seconds to set a new meet record in the 440 hurdles. Sumner Brown, Tech's mile man, placed fifth in the mile with a 4:19 showing, a full two seconds off his best time during the regular season. Jim Flink, in his last meet for MIT, made the finals in both the 100 and 220 yard dashes and placed fifth and sixth in the events respectively.

**Moter-Blumberg third in doubles**  
Tech's tennis squad posted a 6-3 win over Trinity in the final match to finish the season with a far from disastrous 8-8 win-loss record. Highlighting the spring tennis season was the fine showing of team captain Jack Moter '64 and Bob Blumberg '64 in the doubles matches at the New England College Tennis Championships at Williams College May 15. Moter and Blumberg placed third in the tournament, eliminating second seeded Yale 6-4, 6-4 and third seeded Wesleyan 6-3, 5-7, 6-3 before going down to defeat at the hands of Williams in the semi-finals 5-7 and 0-6.

**Lacrosse men finish at 5 and 9**  
After an extremely slow start on the season, Tech's lacrosse men came back strongly near the end of spring and won 4 of their last 6 games to finish the season at 5 and 9. The lacrosse men dropped six of the first seven games of the season and looked like they were headed for a hopeless season until they staged a late season rally and salvaged the last half of the season with a strong defensive showing against eastern teams such as Tufts (8-1) and Trinity (7-5).

## On Deck

**Friday, September 25**  
Golf (V) Rhode Island, Away  
1:00 pm  
**Sunday, September 27**  
Sailing (V) Coast Guard  
Pentagonal  
**Tuesday, September 29**  
Golf (V) Massachusetts, Home  
12:30 pm  
Tennis (V) Rhode Island, Away  
3:00 pm

## Grads organize crew

By P. Blaklock

Several graduate students, tired of the sedentary life decreed for them, decided to form a graduate crew last fall. It became, and remains, the only all-graduate sports club at MIT.

In spite of initial difficulties finding oarsmen, a crew was entered for the Child's Cup Race last fall (Classday races), and in the spring, races were arranged against Dartmouth, Amherst and BU.

This season will see an increased membership, including oarsmen from MIT, Harvard, Yale, Syracuse and Columbia. Any crew men interested should contact Ralph Copperman X4995 or Mel Platte X3552.

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